# Floating Kelp Resources in the Strait of Juan de Fuca and the Pacific Coast of Washington

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## Abstract

Kelp beds consisting of *Macrocystis integrifolia* (giant kelp) and *Nereocystis luetkeana* (bull kelp) stretch along 313 kilometers (about 12%) of Puget Sound and the Strait of Juan de Fuca. These species have float-like structures that hold the upper portion of the plant at the surface. The multi-canopied beds provide habitat for diverse communities, including critical habitat for many important commercial and sport fishes and invertebrate species, such as juvenile and adult salmon, rockfish, herring, lingcod, abalone, and crab. Since 1988, the Department of Natural Resources, Ecoscan Resource Data, and other agencies have used aerial photography to map floating kelp in the Strait of Juan de Fuca and along the outer coast. Trends in annual areal extent, density, and species composition over nine years are analyzed. Despite interannual fluctuations, the total area of floating kelp beds has not changed significantly over the last five years. However, significant changes may be occurring over longer periods or within smaller areas. These trends will be discussed in the context of water temperatures, nutrients, weather, shoreline processes, and El Niño events.

# Role of Community Members in Fight Against Exotics: *Spartina* Watch as a Case Study

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## Abstract

In the past four years, Adopt-a-Beach has worked with many partners (governments, tribes, community groups, and schools) to train community members to look for new infestations of *Spartina*, a noxious weed. Over 700 miles have been surveyed by over 250 community members, 30 new infestations have been discovered and removal work has begun or been completed at 18 of those sites.

This paper will address several points:

- The basic premises, and partnership and advisory roles in creating and refining the program;
- The long-term nature both of the threat of exotics and of community stewardship;
- Data management, quality assurance, quality control, and shoreline criteria plans to be outlined to address commonly stated concerns about volunteer monitoring;
- Practical uses, to date, of the data by watershed planners, researchers, land use managers, and community assessment of sensitive sites;
- Discussion of a species-specific program versus multi-species program; and
- The role of communities after major eradication or control efforts have occurred.

The goal of this paper is to outline components of a successful citizen stewardship program directed at stopping the spread of existing exotics so that others may learn about the program and perhaps copy its successes without having to live through the difficulties of trial and error.